

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

November 18, 2003

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Kokomo Grain Company / MSOP 103-18133-00005

Paul Dubenetzky FROM:

Chief, Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618. Indianapolis, IN 46204, within eighteen (18) calendar days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- the date of the postmark on the envelope containing the document, if the document is mailed to (2)OEA by U.S. mail; or
- The date on which the document is deposited with a private carrier, as shown by receipt issued by (3) the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- identification of the terms and conditions which, in the judgment of the person making the request, (6) would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

> Enclosures FNPER.dot 8/11/03



MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

Kokomo Grain Company East Pennsylvania Amboy, Indiana 46911

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

| Operation Permit No.: MSOP 103-18133-00005 | |
|---|----------------------------------|
| Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality | Issuance Date: November 18, 2003 |

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a grain terminal elevator, with a maximum throughput of 20,000,000 bushels of grain per year.

Authorized individual: Thomas Madru

Source Address: East Pennsylvania, Amboy, Indiana 46911 Mailing Address: P. O. Box 745, Kokomo, Indiana 46903

General Source Phone: (765) 457-7536

SIC Code: 5153

Source Location Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Two (2) concrete silos, one (1) with a storage capacity of 550,000 bushels of grain, and one (1) with a storage capacity of 600,000 bushels of grain;
- (b) One (1) grain receiving totally enclosed conveyor, with a maximum rate of 25,000 bushels per hour;
- (c) One (1) bin emptying totally enclosed conveyor, with a maximum rate of 30,000 bushels per hour;
- (d) Two (2) 22,500 bushels/hour receiving legs, which will replace existing two (2) 15,000 bushels/hour receiving legs;
- (e) One (1) 35,000 bushels/hour load out leg, which will replace existing one (1) 8,000 bushel/hour load out leg;
- (f) One (1) 15,000 bushels/hour grain leg, which will replace existing one (1) 6,500 bushels/hour grain leg that elevated grain to the dryers;
- (g) One (1) 60,000 bushels/hour rail load out, which will replace existing one (1) 35,000 bushels/ hour load out; and
- (h) One (1) 80-foot enclosed belt conveyor rated at 35,000 bushels/hour to connect the new leg to the load out.
- (i) One 10 x 11 feet (ft) grain dump with a maximum capacity of 1000 bushels. PM is controlled by the application of oil in boot pit;
- (j) One (1) 26.2 million British thermal units (mmBtu/hr), natural gas-fired column grain dryer with a maximum capacity of 5000 bushels per hour, with plate perforation of 0.078 inch;

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- (k) One (1) 26.2 million British thermal units (mmBtu/hr), natural gas-fired column grain dryer with a maximum capacity of 3,500 bushels per hour, with plate perforation of 0.078 inch;
- (I) Two (2) 50 ft diameter x 100 foot height concrete silos, with a total capacity of 175,000 bushels;
- (m) One (1) 240 x 720 ft flat storage building, with a capacity of 4.8 million bushels;
- (n) One (1) concrete slab for open grain stockpile;
- (o) Four (4) concrete storage silos, each with a storage capacity of 210,000 bushels, each exhausting through air vents located at the top of the silos;
- (p) Six (6) enclosed belt conveyors, each with a capacity of 25,000 bushels per hour; and
- (q) (1) enclosed drag conveyor, with a capacity of 7,500 bushels per hour.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is not required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is not a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is not an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3);
- (c) It is not a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.5 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.6 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days (this time frame is determined on a case by case basis but no more than ninety (90) days) after

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issuance of this permit, including the following information on each emissions unit:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.7 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal

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of a nonroad engine, as defined in 40 CFR 89.2.

B.8 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.9 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)] Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.10 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit or in Section D.1:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

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C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC
 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements
 are applicable for any removal or disturbance of RACM greater than three (3) linear feet
 on pipes or three (3) square feet on any other facility components or a total of at least
 0.75 cubic feet on all facility components.
- (f) Demolition and renovation
 The Permittee shall thoroughly inspect the affected facility or part of the facility where
 the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR
 61.145(a).

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> (g) Indiana Accredited Asbestos Inspector The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

C.8 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.9 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.10 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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(c) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) Two (2) concrete silos, one (1) with a storage capacity of 550,000 bushels of grain, and one (1) with a storage capacity of 600,000 bushels of grain;
- (b) One (1) grain receiving totally enclosed conveyor, with a maximum rate of 25,000 bushels per hour:
- (c) One (1) bin emptying totally enclosed conveyor, with a maximum rate of 30,000 bushels per hour:
- (d) Two (2) 22,500 bushels/hour receiving legs, which will replace existing two (2) 15,000 bushels/hour receiving legs;
- (e) One (1) 35,000 bushels/hour load out leg, which will replace existing one (1) 8,000 bushel/hour load out leg;
- (f) One (1) 15,000 bushels/hour grain leg, which will replace existing one (1) 6,500 bushels/hour grain leg that elevated grain to the dryers;
- (g) One (1) 60,000 bushels/hour rail load out, which will replace existing one (1) 35,000 bushels/hour load out; and
- (h) One (1) 80-foot enclosed belt conveyor rated at 35,000 bushels/hour to connect the new leg to the load out.
- (i) One 10 x 11 feet (ft) grain dump with a maximum capacity of 1000 bushels. PM is controlled by the application of oil in boot pit;
- (j) One (1) 26.2 million British thermal units (mmBtu/hr), natural gas-fired column grain dryer with a maximum capacity of 5000 bushels per hour, with plate perforation of 0.078 inch;
- (k) One (1) 26.2 million British thermal units (mmBtu/hr), natural gas-fired column grain dryer with a maximum capacity of 3,500 bushels per hour, with plate perforation of 0.078 inch;
- (I) Two (2) 50 ft diameter x 100 foot height concrete silos, with a total capacity of 175,000 bushels:
- (m) One (1) 240 x 720 ft flat storage building, with a capacity of 4.8 million bushels;
- (n) One (1) concrete slab for open grain stockpile;
- (o) Four (4) concrete storage silos, each with a storage capacity of 210,000 bushels, each exhausting through air vents located at the top of the silos;
- (p) Six (6) enclosed belt conveyors, each with a capacity of 25,000 bushels per hour; and
- (g) (1) enclosed drag conveyor, with a capacity of 7,500 bushels per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Particulate [326 IAC 6-3-2]

Emission Limitations and Standards

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Drying Operation (two (2) grain dryers) shall not exceed 46.9 pounds per hour (lbs/hr) when operating at a process weight rate of 63.9 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 55.0 P^{0.11} - 40$

where E = rate of emission in pounds per hour; and

D.1.2 New Source Performance Standards (NSPS) [40 CFR Part 60.300, Subpart DD]

Pursuant to 40 CFR Part 60.302, the following requirements shall apply:

On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:

- (a) Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
- (b) Any grain handling operation which exhibits greater than 0 percent opacity.
- (c) Any truck loading station which exhibits greater than 10 percent opacity.
- (d) Any barge or ship loading station which exhibits greater than 20 percent opacity.

D.1.3 Particulate Matter (PM)

Any change or modification which may increase the potential PM emissions to 250 tons per year or the PM10 emissions to 100 tons per year or more from the equipment covered in this permit must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices

Compliance Determination Requirements

D1.5 PM Control Emissions

- (a) The source shall apply mineral oil to the conveyor right after the grain is dumped into the Grain Dump Pit at all times that grain is received at the plant, at a rate of 0.02 percent by weight to meet the limit in Condition D.1.2(a)(2).
- (b) The process enclosure shall be in place at all times the process is in operation.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, the Permittee shall keep records of grain being processed at the plant annually.
- (b) All records shall be maintained in accordance with Section C General Record Keeping

Requirements, of this permit.

Kokomo Grain Company Amboy, Indiana Permit Reviewer: Aida De Guzman Page 14 of 14 MSOP 103-18133-00005

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

| Company Name: | Kokomo Grain Company | |
|----------------------------------|-------------------------------|--|
| Address: | East Pennsylvania | |
| City: | Amboy | |
| Phone #: | 765-457-7536 | |
| MSOP #: | 103-18133-00005 | |
| I hereby certify that Kok | omo Grain Company is | 9 still in operation.9 no longer in operation. |
| I hereby certify that Kok | t omo Grain Company is | 9 in compliance with the requirements of MSOP 103-18133–00005. 9 not in compliance with the requirements of MSOP 103-18133–00005. |
| Authorized Individua | I (typed): | |
| Title: Signature: | | |
| Date: | | |
| | | he source is not in compliance, provide a narrative bliance and the date compliance was, or will be |
| Noncompliance: | | |
| | | |
| | | |
| | | |

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name: Kokomo Grain Company

Source Location: East Pennsylvania, Amboy, Indiana 46911

County: Miami SIC Code: 5153

MSOP No.: 103-18133-00005 Permit Reviewer: Aida De Guzman

The Office of Air Quality (OAQ) has reviewed an application from Kokomo Grain Company relating to the re-permitting of the grain terminal elevator due to incorrect throughput used in the FESOP 103-16038-00005, issued on May 14, 2003. The permit will be re-written, changes will be **bolded** and deletions will be **struck-through** for emphasis):

EPA Guidance for Determining PTE for Grain Elevator will be used to establish the source maximum throughput, and be based on the source's five year largest historical production multiplied by 1.2.

The grain terminal elevator includes the following emission units and pollution control devices. The source has the capability to process 8,500 bushels per hour or 74,460,000 **20,000,000** bushels of grain per year.

- (a) Two (2) concrete silos, one (1) with a storage capacity of 550,000 bushels of grain, and one (1) with a storage capacity of 600,000 bushels of grain;
- (b) One (1) grain receiving totally enclosed conveyor, with a maximum rate of 25,000 bushels per hour;
- (c) One (1) bin emptying totally enclosed conveyor, with a maximum rate of 30,000 bushels per hour;
- (d) Two (2) 22,500 bushels/hour receiving legs, which will replace existing two (2) 15,000 bushels/hour receiving legs;
- (e) One (1) 35,000 bushels/hour load out leg, which will replace existing one (1) 8,000 bushel/hour load out leg;
- (f) One (1) 15,000 bushels/hour grain leg, which will replace existing one (1) 6,500 bushels/hour grain leg that elevated grain to the dryers;

Kokomo Grain Company Page 2 of 6
Amboy, Indiana MSOP No.:103-18133-00005

Permit Reviewer: Aida De Guzman

(g) One (1) 60,000 bushels/hour rail load out, which will replace existing one (1) 35,000 bushels/ hour load out; and

- (h) One (1) 80-foot enclosed belt conveyor rated at 35,000 bushels/hour to connect the new leg to the load out.
- (i) One 10 x 11 feet (ft) grain dump with a maximum capacity of 1000 bushels. PM is controlled by the application of oil in boot pit;
- (j) One (1) 26.2 million British thermal units (mmBtu/hr), natural gas-fired column grain dryer with a maximum capacity of 5000 bushels per hour, with plate perforation of 0.078 inch;
- (k) One (1) 26.2 million British thermal units (mmBtu/hr), natural gas-fired column grain dryer with a maximum capacity of 3,500 bushels per hour, with plate perforation of 0.078 inch;
- (I) Two (2) 50 ft diameter x 100 foot height concrete silos, with a total capacity of 175,000 bushels;
- (m) One (1) 240 x 720 ft flat storage building, with a capacity of 4.8 million bushels;
- (n) One (1) concrete slab for open grain stockpile;
- (o) Four (4) concrete storage silos, each with a storage capacity of 210,000 bushels, each exhausting through air vents located at the top of the silos;
- (p) Six (6) enclosed belt conveyors, each with a capacity of 25,000 bushels per hour; and
- (g) (1) enclosed drag conveyor, with a capacity of 7,500 bushels per hour.

History

On September 316, 20023, Kokomo Grain Company submitted an application to the OAQ to add new concrete silos and to be re-permitted, pursuant of the new permitting rules, 326 IAC 2 that becomes effective on December 25, 2998. be re-permitted due to incorrect throughput submitted to OAQ, which was the basis of the issued FESOP.

Emission Calculations

See Page 1 through 75 TSD Appendix A of this document for detailed emissions calculations.

The PTE was determined based on the five year largest historical production multiplied by 1.2. The source also added a cushion for future expansion. The throughput used in the PTE calculations is 20,000,000 bushels/year.

| <u>Year</u> | | Bushel Processed |
|-------------|---|-------------------------|
| 1998 | - | 13,984,000 |
| 1999 | - | 12,846,000 |
| 2000 | - | 12,997,000 |
| 2001 | - | 14,285,000 |
| 2002 | - | 11,281,000 |

Existing Approvals

The source is operating under a construction permit CP 103-8706-00005, issued on February 17, 1998, and FESOP 103-16038-00005, issued on May 14, 2003.

After the new equipment is added the source will be become a Part 70 source, but chose to operate under a Federally Enforceable State Operating Permit (FESOP). Prior to these addition,

Kokomo Grain Company Amboy, Indiana MSOP No.:103-18133-00005 Permit Reviewer: Aida De Guzman

the source would have needed a Minor Source Operating Permit (MSOP).

Recommendation

The staff recommends to the Commissioner that the Federally Enforceable State Operating Minor Source Operating Permit (MSOP) be approved. This recommendation is based on the following facts and conditions:

Page 3 of 6

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 316, 20023 with additional information received on October 21, 2002, and March 11, 2003.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, which includes proposed and permitted emission units.

| Pollutant | Unrestricted Potential Emissions (tons/yr) |
|-----------------|--|
| PM | 549.8 148.0 |
| PM-10 | 168.5 46.5 |
| SO ₂ | 0.1 |
| VOC | 1.3 |
| CO | 19.3 |
| NO, | 22.9 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of Particulate Matter (PM) and Particulate Matter Less Than Ten Microns (PM10) are each greater than 25 equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 6.1, Minor Source Operating Permit (MSOP). The source, requested to limit the PTE on the PM10 less than 100 tons per year in order to operate under the Federally Enforceable State Operating Permit (FESOP) Program.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10 and all the other criteria pollutants except PM are each less than one hundred (100) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Potential to Emit After Issuance

The following table summarizes the total potential to emit, reflecting all limits, of the significant emission units after controls.

| | | Potential to Emit After Issuance (tons/year) | | | | | | |
|--|-----------------------------------|---|------|-----|------|------|---|--|
| Process/emission unit | PM | PM PM-10 SO ₂ VOC CO NO _x HAP | | | | | | |
| Drying Operation (Two Grain Dryers) | 128.54 62.04 | 33.74 17.14 | 0.14 | 1.3 | 19.3 | 22.9 | - | |
| Grain Receiving | 104.8 50.4 | 34.4 16.5 | 0.0 | 0.0 | 0.0 | 0.0 | - | |
| Internal Handling | 3.6 1.7 | 1.98 0.95 | 0.0 | 0.0 | 0.0 | 0.0 | - | |
| Bin Loading | 6.8 3.3 | 1.71 0.82 | 0.0 | 0.0 | 0.0 | 0.0 | - | |

Kokomo Grain Company Page 4 of 6 Amboy, Indiana MSOP No.:103-18133-00005

Amboy, Indiana

Permit Reviewer: Aida De Guzman

| Rail Shipping | 4.7 2.3 | 0.38 0.18 | 0.0 | 0.0 | 0.0 | 0.0 | - |
|--------------------------|----------------------------------|--------------------------------|------|-----|------|------|---|
| Total PTE After Issuance | 248.4 119.7 | 72.2 35.6 | 0.14 | 1.3 | 19.3 | 22.9 | - |

(a) This existing source, which includes New Source Review is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52:21, the PSD requirements do not apply.

County Attainment Status

The source is located in Miami County.

| Pollutant | Status | | | | |
|-----------------|----------------|--|--|--|--|
| PM-10 | attainment | | | | |
| SO ₂ | attainment | | | | |
| NO ₂ | attainment | | | | |
| Ozone | attainment | | | | |
| СО | attainment | | | | |
| Lead | not determined | | | | |

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Miami County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60):
 - (1) 40 CFR Part 60.300, Subpart DD New Source Performance Standards for Grain Elevators. This NSPS applies to grain terminal elevator with permanent storage capacity of 2.5 million U.S. bushels or any grain storage elevator with storage capacity of 1 million bushels, which includes the following facilities: truck loading and unloading stations, barge and ship loading and unloading stations, railcar loading and unloading stations, grain dryer and all grain handling operations which commences construction, modification, or reconstruction after August 3, 1978.

The source, which is a grain terminal elevator with storage capacity greater than 2.5 million bushels is subject to this NSPS since it was constructed after August 3, 1978; or since it is being modified in this permit. Pursuant to 40 CFR 60.302(c) the following requirements shall apply:

- (A) On and after the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any fugitive emission from:
 - Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
 - (ii) Any grain handling operation which exhibits greater than 0 percent opacity.
 - (iii) Any truck loading station which exhibits greater than 10 percent opacity.
 - (iv) Any barge or ship loading station which exhibits greater than 20

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Amboy, Indiana MSOP No.:103-18133-00005
Permit Reviewer: Aida De Guzman

percent opacity.

(B) Pursuant to 40 CFR Part 60.303(b), the source shall determine compliance with the opacity standards listed above using Method 9 in 40 CFR 60, Appendix A.

The requirements of 40 CFR 60.302(a) do not apply to the two (2) Column Grain Dryers because they do not have a column plate perforation exceeding 0.094 inches.

The requirements of 40 CFR 60.302(b) applies to any process emissions. Process emission as defined in 40 CFR 60.301 of this NSPS means the "particulate matter which is collected by a capture system". This definition is more specific to process emissions that are collected and captured, and did not say any process emissions that **could reasonably be** collected and captured. The source does not have a process where PM is collected by a capture system, therefore 40 CFR 60.302 is not applicable.

- (2) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-6 (Emission Reporting) This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Miami County and has a potential to emit of less than 100 tons per year for CO, VOC, NOx, PM10 and SO2.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration) The source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, and it is not one of the 28 listed source categories.
- (c) 326 IAC 5-1 (Visible Opacity Limitations)
 Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3
 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit and the NSPS, 40 CFR Part 60.300, Subpart DD:
 - (1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

(a) 326 IAC 6-3-2 (Process Operations)
Pursuant to 326 IAC 6-3-2 the particulate matter (PM) from the **drying operation (**two

Kokomo Grain Company Page 6 of 6 Amboy, Indiana MSOP No.:103-18133-00005

Permit Reviewer: Aida De Guzman

(2) grain dryers) shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 55.0 P $^{0.11}$ - 40 where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = $\frac{4,747}{2,283}$ bu/hr = $\frac{132.9}{63.9}$ ton /hr

 $E = 55.0 (\frac{132.9}{63.9})^{0.11} - 40$

= 54.17 46.9 lbs/hr

= 237.3 ton/yr 205.4 the drying operation (two (2) grain dryers) are is in compliance, since their PM limited emission of 128.097 tons/yr PTE is less than the allowable.

(b) 326 IAC 6-4 (Fugitive Dust Emissions) The source is subject to 326 IAC 6-4 (Fugitive Dust Emissions). Pursuant to this rule, the fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The operation of this grain terminal elevator shall be subject to the conditions of the attached NSR/FESOP No.: 103-16038-00005 MSOP 103-18133-00005.

Appendix A: Emissions Calculations

Company Name: Kokomo Grain Company

Address City IN Zip: East Pennsylvania, Amboy, Indiana 46911

MSOP: "103-18133 **Plt ID:** 103-00005

Reviewer: Aida De Guzman

Date Application Received: September 16, 2003

| | | | SUMMARY OF EMISSION | NS | | | | | | |
|---|------------------------------------|-----------|---------------------|-----------|------------|-----------|-----------|--|--|--|
| | UNCONTROLLED EMISSIONS (TONS/YEAR) | | | | | | | | | |
| PULLUTANTS Drying Operation for Both Dryers Grain Internal Bin Shipping Total | | | | | | | Total | | | |
| | Combustion | Drying | Receiving | Handling | Loading | (Rail) | Emissions | | | |
| | Emissions | Emissions | Emissions | Emissions | "Emissions | Emissions | | | | |
| PM | 0.44 | 61.6 | 50.4 | 17.1 | 10.9 | 7.6 | 148.0 | | | |
| PM10 | 1.74 | 15.4 | 16.5 | 9.52 | 2.74 | 0.62 | 46.5 | | | |
| VOC | 1.26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | | | |
| SO2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | | | |
| CO | 19.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.3 | | | |
| NOx | 22.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.9 | | | |

| | | CONTROLLED EM | IISSIONS (TONS/YEAR) | | | | |
|-----------|---------------|----------------------|----------------------|-----------|------------|-----------|-----------|
| PULLUTANT | SDrying Opera | tion for Both Dryers | Grain | Internal | Bin | Shipping | Total |
| | Combustion | Drying | Receiving | Handling | Loading | (Rail) | Emissions |
| | Emissions | Emissions | Emissions | Emissions | "Emissions | Emissions | |
| PM | 0.44 | 61.6 | 50. | 1.7 | 3.3 | 2.3 | 119.7 |
| PM10 | 1.74 | 15.4 | 16. | 0.95 | 0.82 | 0.18 | 35.6 |
| VOC | 1.26 | 0.0 | 0. | 0.0 | 0.0 | 0.0 | 1.3 |
| SO2 | 0.1 | 0.0 | 0. | 0.0 | 0.0 | 0.0 | 0.1 |
| CO | 19.3 | 0.0 | 0. | 0.0 | 0.0 | 0.0 | 19.3 |
| NOx | 22.9 | 0.0 | 0. | 0.0 | 0.0 | 0.0 | 22.9 |
| | | | | | | | |

Appendix A: Emissions Calculations Natural Gas Combustion Only 10 < MM BTU/HR <100 Natural Gas Fired Grain Dryer

Company Name: Kokomo Grain Company

Address City IN Zip: East Pennsylvania, Amboy, Indiana 46911

MSOP: "103-18133 **Plt ID:** 103-00005

Reviewer: Aida De Guzman

Date Application Received: September 16, 2003

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/vr

MMCF/yr

26.19 column grain dryer using natural gas as fuel 229.4

Grain dryer Capacity @ 5,000 bushel per hour

| | Pollutant | | | | | |
|-------------------------------|-----------|-------------|------------|--------------|------------|------------|
| Emission Factor in lb/MMCF | PM 1.9 | PM10 7.6 | SO2 0.6 | NOx 100.0 | VOC 5.5 | CO 84.0 |
| Potential Emission in tons/yr | 0.22 | 0.87 | 0.07 | 11.47 | 0.63 | 9.64 |

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02,

All emission factors are based on normal firing. MMBtu = 1,000,000 Btu

1-01-006-02, 1-03-006-02 and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Appendix A: Emissions Calculations Natural Gas Combustion Only 10 < MM BTU/HR <100 Natural Gas Fired Grain Dryer

Company Name: Kokomo Grain Company

Address City IN Zip: East Pennsylvania, Amboy, Indiana 46911

MSOP: "103-18133 **Plt ID:** 103-00005

Reviewer: Aida De Guzman

Date Application Received: September 16, 2003

Heat Input Capacity
MMBtu/hr

Potential Throughput MMCF/yr

26.19 column grain dryer using natural gas as fuel 229.4

Grain dryer Capacity @ 3,500 bushel per hour

| | Pollutant | | | | | |
|-------------------------------|-----------|------|------|-------|------|------|
| | PM | PM10 | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| Potential Emission in tons/yr | 0.22 | 0.87 | 0.07 | 11.47 | 0.63 | 9.64 |

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx burner = 83, Flue gas recirculation = 30

Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 34

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations Existing Source Emissions - Column Grain Dryer Emission Calculations

Company Name: Kokomo Grain Company

Address City IN Zip: East Pennsylvania, Amboy, Indiana 46911

MSOP: "103-18133 Plt ID: 103-00005 Reviewer: Aida De Guzman

Date Application Received: September 16, 2003

Grain Drying Operation Emissions: 2 Dryers each 26.19 mmBtu/hr (1 @3,500 bushels/hr & 1 @ 5,000 bushels/hr)

| State Potential Emissions (uncontrolled): | | | | | | | | | |
|---|------------------------|----------------------|----------------------|------------------------|------------------------|--|--|--|--|
| Drying Operation (Capacity) | Bushel Weight | PM Emission Factor | PM10 Emission Factor | Potential Uncontrolled | Potential Uncontrolled | | | | |
| (bu/yr) | (lbs/bu) | (Ibs PM/ton) | 25% of PM | PM Emissions | PM10 Emissions | | | | |
| | | | | (tons/yr) | (tons/yr) | | | | |
| 20,000,000 | 56 | 0.220 | 25% | 61.60 | 15.40 | | | | |
| | | | | | | | | | |
| Federal Potential Emissions (controlled): | | | | | | | | | |
| Potential Uncontrolled | Potential Uncontrolled | Control Device Type: | Control Device | Potential Uncontrolled | Potential Controlled | | | | |
| PM Emissions | PM10 Emissions | | Control Efficiency | PM Emissions | PM10 Emissions | | | | |
| (tons/yr) | (tons/yr) | | | (tons/yr) | (tons/yr) | | | | |
| | | | | | | | | | |
| 61.60 | 15.40 | n/a | n/a | 61.6 | 23.61 | | | | |

Methodology:

Emission factors are from U.S.EPA's AP-42, Interim Section 9.9.1, 11/95, Table 9.9.1-2

Potential Uncontrolled PM/PM10 Emissions (tons/yr) = Dryer Capacity (bu/hr) * Bushel Weight (lbs/bu) * (1 ton/2,000 lbs) * PM/PM10 Emission Factor (lbs PM/ton) * (8,760 hrs/yr) * (1 ton/2,000 lbs Potential Controlled PM/PM10 Emissions (tons/yr) = Potential Uncontrolled PM/PM10 Emissions (tons/yr) * [1 - (Capture Efficiency * Control Efficiency)]

Although the 2 dryers have bigger capacities, the PTE will be based on the throughput that the source can only handle.

Appendix A: Emission Calculations GRAIN ELEVATOR

Company Name: Kokomo Grain Company

Address City IN Zip: East Pennsylvania, Amboy, Indiana 46911

MSOP: 103-16038
Plt ID: 103-00005
Reviewer: Aida De Guzman

Date Application Received: Sept. 3, 2002

| | | Uncontrolled Potential to Emit | (tons/year) | | |
|-------------------------------------|-----------------|--------------------------------|-------------|-------------|--------|
| | GRAIN RECEIVING | 'INTERNAL OPERATIONS | BIN LOADING | SHIPPING | TOTAL |
| | (truck) | | | (rail) | |
| Bushels Throughput (bu/yr) | 20,000,000 | 20,000,000 | 20,000,000 | 20,000,000 | |
| Grain Weight (lb/bu) | 56 | 56 | 56 | 56 | |
| PM Emission Factor (lb/ton) | 0.18 | 0.061 | 0.039 | 0.027 | |
| PM 10 Emission Factor (lb/ton) | 0.059 | 0.034 | 0.0098 | 0.0022 | |
| Potential PM Emissions (tons/yr) | 50.4 | 17.08 | 10.92 | 7.56 | 85.96 |
| Potential PM10 Emissions (tons/yr) | 16.52 | 9.52 | 2.744 | 0.616 | 29.4 |
| | | | | | |
| | GRAIN RECEIVING | 'INTERNAL OPERATIONS | BIN LOADING | SHIPPING | TOTAL |
| Potential PM Emissions (tons/yr) | 50.4 | 17.08 | 10.92 | 7.56 | |
| Potential PM10 Emissions (tons/yr) | 16.52 | 9.52 | 2.744 | 0.616 | |
| Control Equipment (1) | N/A | mineral oil and enclosure | mineral oil | mineral oil | |
| Control Efficiency | 0.00% | 90% | 70% | 70% | |
| Controlled PM Emissions (tons/yr) | 50.4 | 1.708 | 3.276 | 2.268 | 57.652 |
| Controlled PM10 Emissions (tons/yr) | 16.52 | 0.952 | 0.8232 | 0.1848 | 18.48 |

Note: Mineral oil is added to the grain after it is received, thus mineral oil control applies to all operations except grain receiving.

Methodology:

Emission Factors are from USEPA's AP-42, Table 9.9.1-1

Uncontrolled 'PM/PM10 Emissions (tons/yr) = throughput, bu/yr * grain wt, lb/bu * ton/2000 lb * Ef, lb/ton * ton /2000 lb

Controlled PM/PM10 Emissions (tons/yr) = Uncontrolled PM/PM10 Emissions * (1-Control Efficiency)